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MEMORANDUM

To: Chair Wes Hayes and Members, SC Commission on Higher Education

From: Chair Terry Seckinger and Members, Committee on Academic Affairs and Licensing

Consideration of Annual Evaluation of Associate Degree Programs
FY 2016-2017

Background

The *South Carolina Master Plan for Higher Education* (1979) requires the annual review of associate degrees in the State's public higher education institutions.[1] In 1996, the passage of Act 359 underscored the importance of program accountability by focusing on performance indicators including time to degree and graduates' first-time passing rates on professional licensure examinations.[2] This edition of the annual evaluation of associate degree programs provides an assessment of academic program performance across all disciplines during the 2016-2017 academic year. Enrollment and completion data and assessment are provided through a general analysis of programs of study at the University of South Carolina system and the South Carolina Technical College System. Institutions complement the data provided with information about the initiatives implemented to continue success of strong-performance academic programs, and plans initiated to increase the success of programs needing to show improvement.

The purposes of this study remain relevant as part of the focus of both state and national governments on institutional accountability. The language of Act 359 maintained the purposes of this annual review as they had been articulated in earlier legislation and Commission policy as follows:

1. to ensure that programs demonstrate responsiveness to employment trends and meet minimum standards of enrollment, graduation, and placement

[1] *South Carolina Master Plan for Higher Education*. Columbia: South Carolina Commission on Higher Education, 1979. 24, 129.
[2] South Carolina, General Assembly. "S*1195 (Rat #0368, Act #0359 of 1996) General Bill." 1995-96 Bill 1195. May 20, 1996. Accessed December 23, 2014. http://www.scstatehouse.gov/sess111_1995-1996/bills/1195.htm.

2. to identify programs which need to be strengthened.

Given the preponderance of associate degree programs which are employment driven and thus-related to specific occupations or occupational sectors, this report has consistently sought to provide insight into specific programs which are either *exceptionally achieving* their ends or are *underperforming* in relationship to the state's current and future economic development needs.

The procedures for this review require each program's productivity to be evaluated in terms of enrollment, number of graduates, and percent of graduates placed in a related job or continuing their studies full-time. The following criteria apply to this review process:

Enrollment	**16** headcount or **12** full-time students at the most recent fall term.
Completions	**6** at the evaluation year or an average of **6** of the recent three-year rolling data.
Employment	**50%** of graduates available for job placement related to their education or continuation of education on a full-time basis.

Programs which fail to meet these criteria must be canceled, suspended, or put on probation unless their continuation is justified to the Commission. Justification for programs may take into consideration factors such as manpower requirements, funding, and employment "stop outs" of students. In addition, three programs—General Technology, Vocational Technical Education, and General Engineering Technology—historically have had different and much more flexible standards of evaluation because of the unique needs they have filled and the low enrollments which they were expected to produce. As such, they have been considered "justified" for continuation regardless of whether they met the evaluation requirements.

When a degree program is placed on probation, the institution may continue to offer it but must provide a plan for the program to meet all criteria within three years. Suspension means that the program's inability to meet the minimum criteria is serious enough to discontinue temporarily the enrollment of new students in the program until the institution can study the need and demand for the program. A program may remain on suspension for three years.

Distribution of Associate Degree Programs by System and Sector

For this reporting period, associate degree programs exist in all 16 technical colleges and the four two-year regional branches of the University of South Carolina (USC). In addition, associate degrees (AA/AS) are offered by USC Columbia at Fort Jackson and by USC Beaufort at the Marine Corps Air Station. Both of these continue at the request of the military base administration and commanders.

This current assessment of associate degree programs in the state's public institutions relies on Fall 2016 enrollment data and academic year 2016-2017 graduation and employment data. Evaluation encompasses 316 associate degree programs in the technical college system, and nine (9) associate degree programs in the USC System: seven (7) at the two-year campuses, one at USC Beaufort, and one at USC Columbia. New associate degree programs (those implemented within the past three years) are always excluded from this analysis.

I. General Analysis of the Programs of Study in the USC System

Table 1 Five Year Data of USC System AA/AS Program Graduates

	2012-13	2013-14	2014-15	2015-16	2016-17
Four-Year Campus					
USC Columbia (Ft. Jackson)	4	3	4	3	6
USC Beaufort (Marine Corps Air Station)	4	1	0	3	3
SUB-TOTAL	**8**	**4**	**4**	**6**	**9**
Two-Year Campus					
USC Lancaster	100	79	67	67	104
USC Salkehatchie	118	204	227	146	153
USC Sumter	84	73	111	117	117
USC Union	58	58	44	55	62
SUBTOTAL	**360**	**414**	**449**	**385**	**436**
TOTAL	**368**	**418**	**453**	**391**	**445**

Source: USC annual reports on associate degree data

As stated, all USC regional campuses designated as "two-year," as well as USC Beaufort at the Marine Corps Air Station and USC Columbia at Fort Jackson, continue to offer Associate of Arts/Associate of Science degree programs. USC Beaufort, formerly a two-year institution, approved to become a four-year institution in June 2002, has been permitted by the Commission on Higher Education to continue to offer the Associate of Arts/Associate of Science degree program at the military bases in Beaufort. Though the number of graduates from the program at USC Beaufort has remained the same compared with the previous year (See **Table 1**), it still did not meet the productivity standards.

In February 1998, USC Columbia requested and received approval to revise its mission statement so that its ongoing offering of the Associate of Arts degree program at Fort Jackson would be officially included as part of its institutional mission. Enrollment and graduation data show that this program is small though completions met the standard during 2016-2017 review cycle. (**See Table 1.**)

In the past, Commission staff reasoned that because the AA/AS at Fort Jackson is small and peripheral to the mission of the state's comprehensive *research* university, the degree program would be more appropriately offered by a two-year institution, either USC Sumter or Midlands Technical College. The University administration has maintained historically that the program is integral to fulfilling the University's community and humanitarian mission, and representatives of Fort Jackson have strongly supported this view, despite the program's small size.

As **Table 1** shows, over the most recent five years the numbers of graduates from the AA/AS programs in the University of South Carolina system have varied considerably. The self-reported data from the USC Columbia Institutional Research Office show that the total number of AA/AS graduates in the USC System

increased 13.81% (391 to 445) from 2015-2016 to 2016-2017. For 2016-2017, four (4) of the six (6) USC campuses offering the AA/AS program have experienced increases in graduates compared to the 2015-2016 academic year. Two (2) USC campuses remained the same number in graduates. USC Lancaster had the greatest gain (55.22%) in the number of graduates (from 67-104).

Completion of an AA/AS degree is a critical success factor for both student transfer to a four-year institution and the rate at which transfer students complete the baccalaureate degree.[3] These dynamics, linked with students' eligibility for the Lottery Tuition Assistance Program while working toward their AA/AS degrees, suggests that the two-year USC regional campuses should continue to review and implement the most effective strategies for promoting attainment of the AA/AS degree as a "best practice" to encourage student progression toward completion of a baccalaureate degree.

Applied, Occupationally-Specific Two-Year Degrees in the USC System

The two-year campuses of the USC system present an important challenge to and opportunity for higher education institutions in South Carolina. Three of the four two-year regional campuses are located in communities without a main campus of a technical college: USC Lancaster, USC Salkehatchie, and USC Union. Of these three, only USC Lancaster offers occupationally-specific degree programs, although neither their authorizing legislation nor Act 359 prohibits the others from offering such degrees. The occupational programs at USC Lancaster are in nursing, criminal justice, and business. Graduates from the occupationally-specific two-year programs at USC Lancaster are listed below in **Table 2** for the past four academic years. While the number of graduates has decreased in criminal justice in this reporting year, the enrollment of the three programs have remained strong. The USC Lancaster occupational associate degree programs serve a small but vital set of counties in the state.

Table 2 USC Lancaster Graduates of Five-Year Occupational Associate Degree Programs of Study (Academic Years 2012-13---2016-17)

Academic Year	Nursing	Criminal Justice	Business
2012-2013	7	24	29
2013-2014	2	26	25
2014-2015	9	16	38
2015-2016	3	18	25
2015-2017	9	11	35

In summary, graduation rates and student enrollment data for the current review period show that all the two-year programs in the USC system (AA/AS and occupational programs) are currently meeting productivity requirements.

II. General Analysis of Associate Degree Programs in the Technical Colleges

[3] "Affordability and Transfer: Critical to Increasing Baccalaureate Degree Completion." The National Center for Public Policy in Higher Education. June 1, 2011. Accessed December 19, 2014. http://www.highereducation.org/reports/pa_at/index.shtml.

Table 3 provides a summary of the number of programs evaluated over the past 10 years in various categories at the technical colleges.

Table 3 Ten Year (from 2008-09 to 2016-17) Summary of Annual Associate Degree Program Evaluation in the Technical Colleges

Year Evaluated	Good Standing	On Probation	Under Suspension	Cancelled	Total
2008	274	28	2	2	306
2009	275	29	5	0	306
2010	270	30	5	0	309
2011	291	22	4	0	317
2012	285	16	4	0	304
2013	283	7	2	1	293
2014	292	13	3	6	314
2015	291	16	3	0	310
2016	294	17	3	2	316
2017	286	22	2	6	316

In the data for the current annual report, 22 programs out of 316 (= 6.96%) analyzed at the technical colleges are on probation. By comparison, the 2015-2016 academic year report showed a total of 17 programs out of a total of 316 (= 5.37%) were on probation. Compared with the previous year, the increase rate in programs on probation is 29.41% in this reporting year. About twenty-three percent (22.72%) of the programs on probation fall into the disciplinary field of Science, Technology, Engineering, and Mathematics (STEM). For this reporting year, the specific programs (by degree and institution) on probation are in **Table 4**.

Table 4 Associate Degree Programs on Probation in Fall 2017 (Total = 22)

College	Degree	Program
Piedmont Technical College	AGR	Horticulture Technology
Denmark Technical College	BUS	Business Administration
Northeastern Technical College	BUS	Administrative Office Technology
Denmark Technical College	BUS	Administrative Office Technology
Orangeburg-Calhoun Technical College	FIN	Accounting
Piedmont Technical College	HEA	Cardiovascular Technology
Piedmont Technical College	HEA	Respiratory Care

Greenville Technical College	HEA	Emergency Medical Technology
Midlands Technical College	HEA	Health Information Management
Denmark Technical College	IT	Computer Technology
Northeastern Technical College	IT	Computer Technology
Central Carolina Technical College	LAW	Paralegal
Orangeburg-Calhoun Technical College	MFG	Industrial Electronics Technology
Piedmont Technical College	MFG	Industrial Electronics Technology
Technical College of the Lowcountry	MFG	Industrial Electronics Technology
Spartanburg Community College	MFG	Industrial Electronics Technology
Aiken Technical College	MKT	Marketing
Midlands Technical College	STEM	Architectural Engineering Technology
Trident Technical College	STEM	Civil Engineering Technology
Midlands Technical College	STEM	Civil Engineering Technology
Aiken Technical College	STEM	Electronics Engineering Technology
Denmark Technical College	STEM	Electro-mechanical Engineering Technology

II A. Science, Technology, Engineering, and Mathematic (STEM) Programs

In the 2016-2017 report year, STEM programs represented the highest number (5) on probation. Manufacturing (MFG) and Health Care (HEA) were the second highest with four (4) programs respectively on probation. Two (2) STEM programs were put on probation status during 2015-2016 were placed on suspension status during 2016-2017 reporting year.

The data showing low graduates in STEM programs is long-standing. However, all five (5) STEM programs on probation had good enrollment with four (4) programs over 30 headcount enrollment. Therefore, the emerging issue is retention. As a system, the technical colleges of South Carolina have been described as a national model for preparing the state workforce. However, the System needs to continue to work on developing a long term plan to help student progress to completion in order to remove any Engineering Technology programs from the "probationary" group, and keep them off. These programs assist the state in attracting and retaining businesses which want to be in South Carolina. Such industries tend to be engines of major growth and innovation, attracting other corporations to enter into the state. BMW and Boeing are two examples of industries that have moved to South Carolina and provide extensive intangible benefits aside from jobs and income generated.

II B. Continuing Success of the AA/AS Programs in the Technical Colleges

Associate degree programs are of unique benefit to the state and to students because they provide the equivalent of the first two years of a baccalaureate education, but at a much lower cost than the standard four-year institution. As of Fall 2009, all associate-level degrees in the Technical College System have been changed to the three nationally recognized designations: A.S., Associate in Science; A.A., Associate in Arts; and A.A.S., Associate in Applied Science.

A primary purpose of the AA/AS degree programs offered at the state's two-year institutions is to prepare students for transfer into baccalaureate programs. In South Carolina, AA/AS programs began in the 1970s in response to the needs of persons who, for reasons of finance, geography, and/or historical under-representation in higher education (especially mature students, women, and minorities), found it much more possible to begin a baccalaureate degree program by taking the first two years of coursework at a technical college.

For this reporting year, all AA/AS programs in the Technical College System are in the *Good* category regarding the first criterion: that is, producing "at least six (6) graduates during the evaluation year or an average of at least six graduates over the most recent three-year period."[4] (See **Table 5.**)

As **Table 5** demonstrates, the AA/AS programs in the Technical College System produce a number of program completers, therefore availing many South Carolinians the possibility for transfer to a four-year degree program. In fact, the 2016-2017 data show that associate degree programs produced about 1.13% more graduates compared to the previous year from 2921 to 2954. Five state technical colleges graduated more students than in the preceding year.

Table 5 Graduates of AA/AS Degrees by Technical College, 2012-13 through 2016-17

Technical College	2013	2014	2015	2016	2017
Aiken Tech	75	95	56	51	58
Central Carolina	65	60	71	46	77
Denmark	32	20	25	21	9
Florence-Darlington	61	78	68	92	77
Greenville	229	260	312	419	322
Horry-Georgetown	426	455	533	533	530
Midlands	393	321	354	374	470
Northeastern	35	46	53	47	37
Orangeburg-Calhoun	27	17	15	38	20
Piedmont	63	81	94	118	100
Spartanburg Community College	121	136	126	174	153
Lowcountry	26	53	64	67	63
Tri-County	112	454	258	274	291
Trident	611	508	565	498	588
Williamsburg	24	26	30	34	20
York	91	105	137	135	139
TOTAL	**2391**	**2715**	**2761**	**2921**	**2954**

[4] P.2.

Table 6 demonstrates the increase in enrollment in five technical college compared with the previous year.

Table 6 Exceptional Achievement: Technical Colleges Graduation Rates, 2016-2017

Technical College	Percentage Increase %	Increase Differential = N
Central Carolina	67%	+31
Midlands	26%	+96
Trident	18%	+90
Aiken Technical College	14%	+7
Tri-county	6%	+17

The 2009 Higher Education Action Plan addresses the importance of institutions of higher learning creating pathways to successfully transfer students from two-year degree programs to four-year degree programs. In making South Carolina one of the most educated states in the country by the year 2030, the Action Plan recommends that the State "create incentives and requirements for seamless transitions between and among two-year and four-year institutions, including the implementation of a statewide initiative to monitor transfer."[5] The CHE has developed an online course transfer and articulation tool, *SC TRAC*, which will help transfer students identify course equivalencies and degree credit awards for transfer courses. Work is continuing with the institutions to manage course equivalencies, transfer information into the system, and to install interfaces with the system so that information related to course articulation and transfer is easily added and displayed.

II C. Importance of the Associate Degree Nursing Programs (ADN)

For a number of years this annual report has been grounded in two basic assumptions about the program of study leading to the associate degree in nursing:

1. In South Carolina the associate degree in nursing is accepted by employers as a legitimate credential for a Registered Nurse (RN).
2. Meeting employers' demands for a well-educated nursing workforce to provide safe care in hospitals and other healthcare settings requires the sustained commitment of each institution to enroll and graduate increasingly larger numbers of students.

According to *South Carolina Industry Employment Projection,* employment projection increase rate in Healthcare Practitioners and Technical and Healthcare Support will be 17.41% and 24.38% respectively in 2026 (Source: South Department of Workforce and Employment). The healthcare profession is the fastest growing industry in South Carolina[6].

Table 7 presents the number of graduates from the 14 two-year technical colleges over the course of ten consecutive report years. In this reporting year 2016-2017, the number of graduates increased 3.27% (from1192 to 1231) compared with the previous year. The job placement rate of 96% has continued to remain high.

[5] "Leveraging Higher Education for a Stronger South Carolina." South Carolina Legislature. March 1, 2009. Retrieved from http://www.scstatehouse.gov/archives/CommissiononHigherEd/ActionPlan_Fullreport_final_withcover.pdf.
[6]South Carolina WIOA Unified State Plan. Retrieved from https://dew.sc.gov/docs/default-source/default-document-library/final-unified-plan-rev-may-9-2016.pdf?sfvrsn=90092724_2

Table 7 Ten Year Data for Total Numbers of Graduates from Technical Colleges' Associate Degree in Nursing Programs, 2007-08 through 2016-17

2007-2008	1156
2008-2009	1274
2009-2010	1283
2010-2011	1272
2011-2012	1264
2012-2013	1413
2013-2014	1308
2014-2015	1159
2015-2016	1192
2016-2017	1231

Though the number of graduates in seven (7) out of 14 nursing programs increased, the other half of the programs experienced decline in graduation. Among the seven institutions, Midlands Technical College increased about 84% (from 122 to 224) and York College about 36% (from 22 to 30).

II D. Degree Programs No Longer on Probation

For the current reporting year, two (2) programs which had been on probation in the technical colleges for the previous year's reporting period have been recommended by the State Technical College System for placement in *Good* standing. The degrees and institutional locales of all the programs moving from *Probation* to *Good* are in **Table 8**.

Table 8 Degree Programs Returning to *Good* Status from *Probation* 2016-2017 (=2)

College	Degree	Program
Greenville Technical College	STEM	Architectural Engineering Technology
Tri-County Technical College	MFG	Automotive Technology

II E. Degree Programs on Suspension

Table 9 shows the programs in the Technical College System for this period which are on suspension. It is noteworthy that there are only two programs in this category, which suggests that planning by the Technical College System for technical programs, based upon community and business demand for graduates in certain fields, has minimized the need to suspend and cancel programs.

Table 9 Associate Degree Programs on Suspension in 2017 (or Continued for 1st or 2nd Year Suspension) (=2)

College	Degree	Program
Technical College of the Lowcountry	STEM	Civil Engineering Technology
Spartanburg Technical College	STEM	Radiation Protection Technology

Summary

The associate degree programs in the USC system and the Technical College System are overwhelmingly meeting statewide productivity standards which have been reported annually since 1983. Two hundred and eight-six (286) of the 316 technical college programs evaluated meet the *Good* status requirements for this reporting year. Additionally, seven (7) of the nine (9) associate degree programs in the University of South Carolina system meet the *Good* status requirements for this reporting year. The outliers are the associate degree programs at USC Beaufort and USC Columbia Ft. Jackson campus. As noted on page 3, these programs need the continued implementation of proactive efforts to establish and sustain effectiveness above current productivity thresholds.

Similarly, this analysis of programs in the Technical College System also suggests that despite improvement in the two (2) degree programs that progressed to *Good* status, efforts need to be made to retain students and help them progress toward graduation in STEM programs, manufacturing, and Healthcare, which are important fields to the State's economic development.

Recommendation

The Committee on Academic Affairs and Licensing recommends the Commission commend this report's designation of programs for the current reporting year as shown in **Tables 1, 3, 4, 6, 8, and 9.** Because of the importance of certain associate degree programs to economic development in South Carolina, the staff further recommends that the Committee and Commission encourage the State Technical College system to continue to explore ways to increase enrollments and retention to graduation in programs in STEM, manufacturing, and healthcare fields and the USC system campus in Beaufort and Ft. Jackson to increase enrollment and retention to graduation in their associate degree programs.

Given the present economic situation, it is imperative that the technical colleges and the University of South Carolina regional campuses work collaboratively to increase the numbers of AA/AS degree completers and prepare them for entry into a four-year program. A learned and skilled workforce is essential for economic prosperity for any state and will promote a pervasive education culture in the state of South Carolina.